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10/078,334	02/14/2002	Koichi Nakata	9333/285	7347

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EXAMINER

YOUNG, DONALD G

ART UNIT PAPER NUMBER

2626

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/078,334

Applicant(s)

NAKATA, KOICHI

Examiner

Donald Young

Art Unit

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14 and 16-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 2-4 is/are allowed.
6) ☒ Claim(s) 1-12, 14 and 16-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In response to the Office Action mailed September 22, 2005, applicant submitted an Amendment filed on December 8, 2005, in which the applicant amended the Abstract and amended claims 1-12, 14-20, and cancelled claims 13 and 15. The objection to the Abstract for being too detailed is withdrawn.

Response to Arguments

2. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues original claim 15 is neither disclosed nor suggested by Van Kleeck. Examiner contends however that Van Kleeck successfully satisfies this limitation. Van Kleeck is generally directed towards a voice controlled computer system for communicating instructions in response to spoken commands received by a speech input device. Citing col. 5, lines 10-24 and col. 6, lines 6-63, it is clear that Van Kleeck successfully meets the bounds of the former claim 15. The limitation states the device provides to user a speech input executing command corresponding to the other. Van Kleeck teaches that when the speech input is recognized as a valid command, the interface searches for and displays all the commands or children nodes corresponding to the recognized command and this in turn becomes

Art Unit: 2654

the new list of active words/commands corresponding to the recognized input command.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 14 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Kleeck et al. (USPN 5,890,122).

Regarding claim 14, Van Kleeck et al. disclose of a speech input guidance device wherein:

- a speech input guidance data accumulating unit (509) for recording speech input executing commands (a table of available commands are stored in the input facility and so inherently would have been recorded to be stored in said location) categorized by operation object (computer instructions are the device operations while the particular application program constitutes operation object; col. 3, lines 29-32 and col. 4, lines 10-23);
- a speech input guidance output request detecting unit (502) for detecting a speech input guidance output request from a

Art Unit: 2654

user (the user activating the facility with an application program constitutes a request for speech guidance output); a data searching unit (502) for searching for and providing data (the process of displaying available commands would inherently require the processor to search the computer memory for available commands corresponding to the particular application program being utilized) in said speech input guidance data accumulating unit according to an output from said speech input guidance output request detecting unit; and a speech input guidance output unit (speech synthesizer; display) for providing speech input executing commands searched by said data searching unit as one of by a display screen and by speech (col. 4, lines 10-23 and lines 34-44 and col. 7, lines 44-48).

- a speech input guidance data accumulating unit (509) for recording (a hierarchy table of available commands for each application is stored in the input facility and so inherently would have been recorded to be stored in said location) speech input executing commands for indicating an operation object (card node) and commands for a speech input for indicating the content of an operation (children nodes) while they are being associated (correspond) with each other, and when said speech input guidance output request detecting unit (502) detects (spoken command is recognized) that a user enters only one of said speech input executing command for indicating an

Art Unit: 2654

operation object and said speech input executing command for indicating an operation content, said data searching unit (502) searches for and provides (the interface searches for and displays all of the children nodes corresponding to the recognized command as the new list of active words) a speech input executing command for indicating an operation content corresponding to the speech input executing command detected by said speech input detecting unit from said speech input guidance data accumulating unit (col. 5, lines 10-24 and col. 6, lines 6-63).

Regarding claim 20, Van Kleeck et al. disclose of a speech input Guidance device comprising:

- a speech input executing command indicating means for specifying one of the speech input executing commands (active words) provided on the screen from said speech input guidance output unit (505; col. 4, lines 63-66); and

a device operation means for conducting an operation (keystroke commands) specified by said speech input executing command indicating means (col. 4, line 66 through col. 5, line 7).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2654

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Kleeck et al. (USPN 5,890,122) and in view of Nakano et al. (USPN 4,766,529).

Regarding claim 1, Van Kleeck et al. disclose of a method for speech input guidance device comprising:

- detecting a device operation by a user (the process of activating the facility would inherently require the computer to detect keystrokes or mouse clicks; col. 4, lines 24-25);
- searching (the process of displaying available commands would inherently require the processor to search the computer memory for available commands corresponding to the particular application program being utilized) for a speech input executing command (available commands) corresponding to the device operation (available from a speech input guidance data accumulating unit (504); and providing (displaying) the user with searched speech input guidance (col. 4, lines 10-23 and lines 34-44).

Van Kleeck et al. fails to disclose the speech guidance is stopped if it would interfere with an audio or image output of an operated device. However Nakano et al. disclose wherein the speech

Art Unit: 2654

input guidance is stopped if it would interfere with an audio or image output of an operated device (guidance is interrupted and stopped when any device that produces an audio output (i.e. radio in a car) or that produces an image (i.e. navigation maps). A stop signal is outputted when a key at the key input section is depressed signifying the operation of an onboard device (col. 6, lines 52-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicants invention to substitute Van Kleeck et al.'s device for speech input guidance with Nakano et al.'s speech input guidance controlling unit for stopping the speech input guidance. The motivation for doing so would have been to avoid confusing the user/driver with simultaneous prompts and music.

Regarding claim 5, Van Kleeck et al. disclose of a speech input guidance device comprising:

- a device operation detecting unit (502) for detecting a device operation by a user (col. 4, lines 10-15 and lines 24-25);
- a speech input guidance data accumulating unit (509) for recording speech input guidance data (a table of available commands are stored in the input facility and so inherently would have been recorded to be stored in said location) for guiding the user to a command to be executed by means of speech for device operations categorized by device operation type (computer instructions are the device operations while

Art Unit: 2654

the particular application program constitutes operation type; col. 3, lines 29-32 and col. 4, lines 10-23);

- a data searching unit (502) for searching (the process of displaying available commands would inherently require the processor to search the computer memory for available commands corresponding to the particular application program being utilized) for, and providing (displaying) speech input guidance data corresponding to, the device operation detected by said device operation detecting unit from said speech input guidance data accumulating unit; and a speech input guidance output unit (505) for providing the user with data searched by said data searching unit (col. 4, lines 10-23 and lines 34-44).

Van Kleeck et al. fail to disclose expressly of providing whether or not guidance is to be conducted, and stopping guidance when the speech input guidance controlling unit provides and output for stopping. However, Nakano et al. teach a speech input guidance controlling unit (5) for providing whether or not speech input guidance is to be conducted; and the speech input guidance is stopped when the speech input guidance controlling unit (5) provides an output (compulsory stop signal) for stopping the speech input guidance (If the operator guidance control section does not detect a stop signal, guidance is conducted. In this way, the control section provides whether or not speech guidance is conducted; col. 2, lines 62-68). At the time the invention was made, it would have been obvious to a

Art Unit: 2654

person of ordinary skill in the art to substitute Van Kleeck et al.'s speech input guidance device with Nakano et al.'s speech input guidance controlling unit. The motivation for doing so would have been to allow for the first operation to be terminated so that another operation can begin, as taught by Nakano et al. (col. 2, lines 11-12).

The remaining limitation of claim 5 is similar to the final one of claim 1, and is rejected for the same rationale.

Regarding claims 6,7,8 and 10, Van Kleeck et al. fail to disclose a speech input guidance controlling unit for stopping the speech input guidance when the operation of a device is detected.

However, Nakano et al. suggest a speech input guidance controlling unit for stopping the speech input guidance when the operation of a device for providing an audio output is detected, when the operation of a radio is detected, when the operation of route guidance by speech of a navigation device is detected, when route guidance for a navigation device is shown on a guidance display screen (The guidance is interrupted and stopped when a key at the key input section is depressed. Any device that produces an audio output (i.e. radio in a car, navigation system in a car) would require the depression of keys in order to conduct operation. Therefore, route guidance displayed on a screen had to undergo some ordered depression of keys in order to be outputted and displayed; col. 6, lines 52-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicants invention to substitute Van Kleeck

Art Unit: 2654

et al.'s device for speech input guidance with Nakano et al.'s speech input guidance controlling unit for stopping the speech input guidance. The motivation for doing so would have been to avoid confusing the user/driver with simultaneous prompts music.

Regarding claim 9, Van Kleeck et al. disclose of a speech input guidance device wherein:

- at least one of guidance with a screen and a confirmation sound for indicating that a speech input is available is provided when the speech input guidance is stopped (the guidance data is provided to a screen display when made available and also goes into a wait state; col. 4, lines 34-40 and col. 5, lines 7-9).

Regarding claim 19, Van Kleeck et al. disclose of a speech input guidance device comprising:

- a speech input guidance data accumulating unit (509) for recording speech input executing commands and mutual correspondences (512 and 513) among the speech input executing commands (a table of available commands are stored in the input facility and so inherently would have been recorded to be stored in said location; col. 3, lines 29-32 and col. 4, lines 10-23);

Art Unit: 2654

- a speech input detecting unit (sound input module) for detecting (receives/returns) a speech input operation by a user (col. 4, lines 57-67).
- The speech input executing commands searched by said data searching unit are prioritized according to frequency of use (col. 7, lines 45-47; infrequently used words or omitted from the spoken word hierarchy and therefore words being used more frequently fall into a spoken word hierarchy).

The remaining limitations of claim 19 are the same or similar to that of the limitations of claim 14 and claim 5 and so is rejected for the same reasons (see above).

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Kleeck et al. as applied to claim 14 above, and in view of White (USPN 5,386,494).

Regarding claim 16, Van Kleeck et al. teach of recording speech input executing commands into a speech input guidance data accumulating unit, but fails to disclose of providing paraphrased speech input executing commands. However, White teaches recording speech input executing commands for paraphrasing the individual speech input executing commands, and the speech input guidance output unit provides paraphrasing speech input executing commands corresponding (associated) to an entered speech input executing command (Fig. 5C; col. 8, lines 43-54).

Art Unit: 2654

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to supplement Van Kleeck et al.'s speech input guidance device with White's paraphrasing of commands. The motivation for doing so would have been to allow the user to easily check whether the computer has the capability to recognize the context of a spoken command, as taught by White (col. 8, lines 48-51).

6. Claims 11-12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Kleeck et al. in view of Nakano et al. as applied to claims 5 and 10 above, and further in view of Cohen et al. (USPN 6,560,576).

Regarding claim 11 and 12, Nakano et al. fail to disclose recording a count of the outputs. However, Cohen et al. disclose a data recording unit for recording counts of the guidance speech outputs (played prompts) and of the guidance screen display outputs (prompts) separately (Examiner takes the position that recorded counts would be made separate since the data correlates to two different interfaces) categorized by the device operation type (prompt specific conditions) from said speech input guidance output unit (23) into the speech input guidance data accumulating unit (22), wherein said speech input guidance controlling unit (21) uses the data searching unit (21) to search for/receive a count of outputs corresponding to a device operation, and stops the speech input guidance when said count of outputs exceeds a predetermined number (Fig. 2; col. 9, lines 8-17).

Art Unit: 2654

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to supplement Van Kleeck et al.'s and Nakano et al.'s speech input guidance device with Cohen et al.'s recording output counts. The motivation for doing so would have been to allow experienced users benefit from learning to use a system more efficiently by eliminating the superfluous repeating of prompts, as taught by Cohen et al. (col. 6, lines 8-10).

Regarding claim 18, Van Kleeck et al. disclose of a speech input guidance device wherein:

- a speech input guidance data accumulating unit (509) for recording speech input executing commands (a table of available commands are stored in the input facility and so inherently would have been recorded to be stored in said location) categorized by operation object (computer instructions are the device operations while the particular application program constitutes operation object; col. 3, lines 29-32 and col. 4, lines 10-23);
- a speech input guidance output request detecting unit (502) for detecting a speech input guidance output request from a user (the user activating the facility with an application program constitutes a request for speech guidance output); a data searching unit (502) for searching for and providing data (the process of displaying available commands would inherently require the processor to search the computer memory for

Art Unit: 2654

available commands corresponding to the particular application program being utilized) in said speech input guidance data accumulating unit according to an output from said speech input guidance output request detecting unit; and a speech input guidance output unit (speech synthesizer; display) for providing speech input executing commands searched by said data searching unit as one of by a display screen and by speech (col. 4, lines 10-23 and lines 34-44 and col. 7, lines 44-48).

The remaining limitations of claim 18 have the same or similar limitations to that of claim 11, therefore; is rejected for the same reasons (See above).

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Kleeck et al., in view of Cohen et al. (USPN 6,560,576).

Regarding claim 17, Van Kleeck et al. disclose of a speech input guidance device wherein:

- a speech input guidance data accumulating unit (509) for recording speech input executing commands (a table of available commands are stored in the input facility and so inherently would have been recorded to be stored in said location) categorized by operation object (computer instructions are the device operations while the particular application program constitutes operation object; col. 3, lines 29-32 and col. 4, lines 10-23);

Art Unit: 2654

- a speech input guidance output request detecting unit (502) for detecting a speech input guidance output request from a user (the user activating the facility with an application program constitutes a request for speech guidance output); a data searching unit (502) for searching for and providing data (the process of displaying available commands would inherently require the processor to search the computer memory for available commands corresponding to the particular application program being utilized) in said speech input guidance data accumulating unit according to an output from said speech input guidance output request detecting unit; and a speech input guidance output unit (speech synthesizer; display) for providing speech input executing commands searched by said data searching unit as one of by a display screen and by speech (col. 4, lines 10-23 and lines 34-44 and col. 7, lines 44-48).

Van Kleeck et al. fail to teach recording counts of outputs and the dates of the outputs. However, Cohen et al. teach recording at least one of the counts of outputs from the speech input guidance output unit (23) and the dates of the outputs for individual speech input executing commands, and said speech input guidance output unit changes the order (short cut active prompt) of guidance and provides it according to at least one of the counts of outputs and the dates of outputs (the reference teaches the change of order occurs in

Art Unit: 2654

accordance with the counts of the outputs, i.e. after three sessions; col. 6, lines 25-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's to supplement Van Kleeck et al.'s speech input guidance device with Cohen et al.'s change of order of guidance. The motivation for doing so would have been to allow experienced users benefit from learning to use a system more efficiently by eliminating the superfluous repeating of prompts, as taught by Cohen et al. (col. 6, lines 8-10).

Allowable Subject Matter

8. Claims 2-4 are allowable. Claim 2 is allowable because the

Art Unit: 2654

prior art of record does not disclose or suggest of a speech input guidance device wherein the number of speech inputs is counted and guidance is terminated when the count of speech inputs exceeds a predetermined number. It is old and well known in prior art to terminate guidance when the number of speech outputs exceeds a predetermined number. See e.g. Cohen et al. However, the prior art does not disclose or suggest terminating the guidance according to the counts of the speech input.. Claims 3-4 depend from independent claim 2 and therefore are also deemed allowable.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2654

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

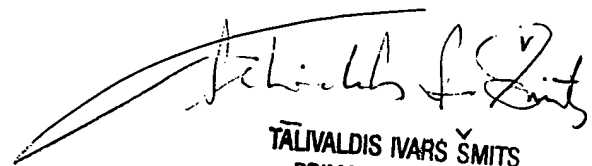
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Young whose telephone number is (571) 272-8134. The examiner can normally be reached on 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis Smits can be reached on (571) 272-7628. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DGY

03/20/2006


TĀIVALDIS IVARS ŠMITS
PRIMARY EXAMINER